Develop, Link, Foster, and Encourage

THE THIRD RECOMMENDATION IN ACTE’s postsecondary reform position statement is to develop curriculum and instructional offerings that link to careers, foster lifelong learning, and encourage completion. Concrete linkages must be developed between middle and high school, postsecondary education and work, with lifelong postsecondary learning a part of this cycle.

For traditional-age students, opportunities to blend secondary and postsecondary teaching and learning—both academic and career and technical education (CTE) courses—will enable more students to move directly from high school to postsecondary education and training. For adults, it is vital to recognize that many learners need to complete postsecondary coursework quickly to obtain skills for the workplace. Intensive short-term credentials, with employer-recognized value and flexible delivery of integrated coursework, can lead to higher completion rates and better employment opportunities for postsecondary students.

While postsecondary CTE has traditionally collaborated with employers to develop programs, ensuring that more students obtain credentials with labor market value requires deeper partnerships, regular communication, and open feedback loops throughout the postsecondary system. CTE, with its applied learning and academic and technical integration, is serving as the connection point between and across these sectors in many places throughout the country as states and institutions develop more seamless pathways to postsecondary education.

Creating Integrated Pathways
Central New Mexico Community College (CNMCC) in Albuquerque, New Mexico, has joined Jobs for the Future’s “Breaking Through” initiative to develop more integrated institutional structures and services. “Breaking Through” is designed to strengthen postsecondary outcomes for low-income adults by focusing on strategies that create more effective pathways into and through pre-college and degree-level programs.

CNMCC is New Mexico’s largest and most comprehensive community college, and the second largest postsecondary institution in the state. It is aligning its programs and services to create a pathway into high-demand construction trades for low-skilled adults. The “Breaking Through” Construction Apprenticeship Program, which began in 2006, provides accelerated and contextualized learning of basic skills and pathways to academic degree and certificate programs. It has strong connections with business and industry and prepares project participants to compete for construction apprenticeship programs.

According to Jane Bradley, interim executive director of CNMCC’s Office of Educational Collaborations, the purpose of the initiative is to get individuals with a relatively low skill level into postsecondary education so that they can eventually earn a degree, and are able to enter the workforce and earn a family supporting wage. The target population has an eighth-grade skill level or below (many lacking even a GED), so intensive services must be provided.
The unique program employs the elements of a streamlined curriculum, flexibility in delivery, strong industry links, program alignment and intensive support services to ensure student success. An advisory team made up of faculty from the School of Educational and Career Advancement and the School of Applied Technologies meets on a regular basis to monitor the program and make cross-department decisions about curriculum, textbooks, recruitment, scheduling, and dealing with a multitude of challenges.

Participants begin in a three-week accelerated reading and math skill-building class that works to correct skill deficiencies; it introduces students to careers in the construction trades such as plumbing, HVAC, carpentry and electricity. This course, and others in the program, is a joint effort between the two traditionally independent schools within the college. The hands-on class prepares students to return to formal education and make appropriate career choices, and to earn the GED so that they can take courses at the college or enter an apprenticeship. Utilizing a cohort approach, students who have had little success with education are part of a support system. Bradley says, “This introductory class is a great community builder. Students begin to have friends to count on, and the success they achieve in the intensive environment builds their self-esteem.” The course is offered at flexible times (often during the breaks between terms) so that students can take advantage of it even with scheduling challenges.

After the introductory class, each cohort
of students takes additional courses in career planning and construction career exploration, which are also offered in an accelerated format. Students can then take more coursework or they can go straight into an apprenticeship program. Students who choose an apprenticeship are given articulated credit at CNMCC for their training.

**Linking to Careers**

The program’s participants are diverse in gender, age and background. Achievement coaches work with students to keep them in school, solve problems that threaten to get them off track, and help them toward the completion of their goals. One thing that these diverse students have in common is a need for clear linkages to future employment opportunities. While most postsecondary students have employment as at least a long-term goal, the target population for the “Breaking Through” initiative often has a critical need to enter the workforce quickly. The priority of linking program elements to the workforce can be seen in every aspect of its design and implementation. For instance, since apprenticeship programs often admit new students in the fall, program designers ensured that students in the first cohort got all the training they needed in the late spring and summer.

Business partners play a critical role in the program as well. The Association of Builders and Contractors, Associated General Contractors, Iron Workers Local 495, Northern New Mexico Independent Electrical Contractors, and the plumbing and pipefitting industry are all involved in accepting apprentices from the program. As an apprentice, students can earn 60 percent of what a journeyperson earns. After approximately six months, apprentices get a 5 percent increase in pay, and this continues until a journeyperson license is earned after three to four years. This progression allows students to see the immediate economic payoff to their education and training.

Many of these partners, such as the Associated Builders and Contractors, Associated General Contractors, and Northern New Mexico Independent Electrical Contractors, are also closely involved in the program’s operation. They have donated funds and supplies to the program for various projects, including community building activities and an award ceremony. Members of the program’s advisory team work closely with employers to maintain a clear understanding of the industry’s evolving skill needs.

With the third cohort to enroll in the program about to finish its introductory course and move into deeper career exploration options, program leaders consider it a success. Almost 10 percent of students from the first two cohorts have already entered a formal apprenticeship, with others still enrolled in coursework toward certificates and degrees. Lis Turkheimer, CNMCC’s interim associate dean for educational and career advancement, says that the links to career opportunities are critical. “What makes the program so special is the accelerated contextualized nature of the curriculum. Students can achieve something quickly, and the link to construction allows students to see a purpose for core skills, such as math, that they have to learn in order to be successful at the postsecondary level.”

Student Elizabeth Renee Cleveland sums up her experiences with the program in a Jobs for the Future newsletter, “I liked the fast pace of the three-week basic skills classes. It kept me from getting bored. I am 41 years old and have two children and four stepchildren, so my time to go to school is limited. I wanted to get on with it. The instructors were fantastic and determined to make sure that we had what we needed.”

**Building a Pipeline**

In developing curriculum and instructional pathways that encourage degree completion, Don Johnson, outreach specialist for Northern Virginia Community College’s (NVCC) Medical Education Campus, emphasizes the importance of building a pipeline of students. As site coordinator of the College and Career Transitions Initiative (CCTI) project at NVCC, Johnson has led efforts to blend secondary and postsecondary educational experiences to enable more students to be successful at the postsecondary level.

CCTI is a collaborative project with the League for Innovation in the Community College and the U.S. Department of Education’s Office of Vocational and Adult Education. The project’s goals are to ease student transitions between secondary and postsecondary educational experiences to enable more students to be successful at the postsecondary level.

CCTI is a collaborative project with the League for Innovation in the Community College and the U.S. Department of Education’s Office of Vocational and Adult Education. The project’s goals are to ease student transitions between secondary and postsecondary educational experiences as well as transitions to employment, and to improve academic performance at both the secondary and postsecondary levels. NVCC was selected as one of the project’s site partners in 2003, and chose to focus on...
health science careers.

The health sciences offers a large number of high-demand, high-wage careers in nursing and allied health in the Northern Virginia area. The program at NVCC is designed to create pathways to these careers and to work with the local secondary school system to capture students’ attention at an early age. While high school health occupations career academies already exist in partner high schools, at that level it is often too late to attract the large number of students necessary to fill the pipeline of needed health care employees. In order to increase enrollment and persistence in postsecondary education, NVCC reached out to younger students. Johnson explained, “The first step in creating successful career pathways was awareness, and awareness must begin while students are in middle school. We can’t wait until students graduate from high school to talk about these programs—even high school itself is too late.”

To increase this awareness, NVCC partners with Virginia Hospital Center to offer summer camps for pupils in grades six through eight. “Camp Med” exposes students to careers in the medical field and to the possibilities that open up with a postsecondary education. Students spend part of the week shadowing doctors and other professionals at the hospital, and then return to the college campus for applied lessons. The students get certified in CPR and participate in role-playing activities such as a mock crime scene. They evaluate and stabilize victims, collect and preserve evidence, and take X-rays, all while being exposed to the wide variety of careers available in the medical profession—from EMT to radiologist.

Cross System Collaboration

Other key outcome goals of the project are to decrease the need for remediation at the postsecondary level; increase academic and skill achievement at the secondary and postsecondary levels; increase attainment of postsecondary degrees, certificates or credentials; and increase entry into employment or further education.

Using a template from the CCTI project, NVCC and its partner high schools have collaborated to develop a complete career pathway for student transition from secondary to postsecondary education. The pathway template includes all of the courses students need to take each year of high school in order to be ready to enter any of NVCC’s health care programs. Through dual enrollment opportunities, many students can complete all of the prerequisites required for entry into the specific postsecondary program of their choice while still in high school; this decreases the time necessary to earn a postsecondary credential.

According to Johnson, one of the biggest strengths of the CCTI project is bringing the high school, community college, and business partners together to outline
the pathway. “We really began to work across the educational system to make the transition seamless. The ongoing collaboration brings clarity of expectations and of students’ abilities. It provides an opportunity for both secondary and postsecondary systems to learn from one another, and it is a real team effort.”

Another key to the project is making sure that all students are prepared to take advantage of the opportunities it offers. Instead of targeting only students who are already college bound, the program incorporates elements to reach the general population. A summer enrichment program was instituted for graduating seniors who need a boost before enrolling at NVCC. The bridge program helps refresh students’ math and English skills so that they can pass the college placement exam, and avoid having to take remedial classes.

Reinforcing the theme of collaboration, NVCC hired high school teachers to serve as instructors. These teachers worked with the college testing and tutoring centers to develop the curriculum for the program, drawing on the expertise of all parties. For example, the high school teachers knew more about the current skill level and deficiencies of the participating students, but the tutoring center had more expertise in the areas that students had problems with once arriving on campus.

In one cohort of students in the summer bridge program, students began with an average high school G.P.A. of 2.4 and needed remediation at twice the national rate. Once the students completed the summer program, 100 percent of them continued on to the next semester, much higher than normal retention rates, and many more completed further developmental courses successfully. “We want to provide opportunities for as many students as possible, students that have a desire to go into careers and have academic potential, but need some help. This model is designed to help any student who is interested in being successful,” adds Johnson.

One student who completed the bridge program is Déshaun Moon. She attended the Wakefield High School Medical Academy and wanted to continue onto postsecondary education. Her participation in the program allowed her to get a job as a patient care assistant in the Intermediate Coronary Care Unit at Virginia Hospital Center at night, while taking classes at NVCC part-time during the day. She is working toward a nursing degree, and the hospital is covering the cost of her tuition at NVCC.

The ultimate goal of both the CNMCC Construction Apprenticeship Program and the CCTI project at NVCC is to improve outcomes for students. Through clearly delineated pathways, high levels of collaboration, curriculum and instruction that is integrated across learning levels, and strong links to industry, both of these programs are accomplishing this goal.

ACTE is very interested to learn about other CTE-related initiatives that work toward achieving the remainder of ACTE’s postsecondary reform recommendations. If you are involved in such a program, please send information to Alisha Hyslop at ahyslop@acteonline.org.